Raven SR Receives Air Permit for Organic Waste-To-Hydrogen Bioenergy Project

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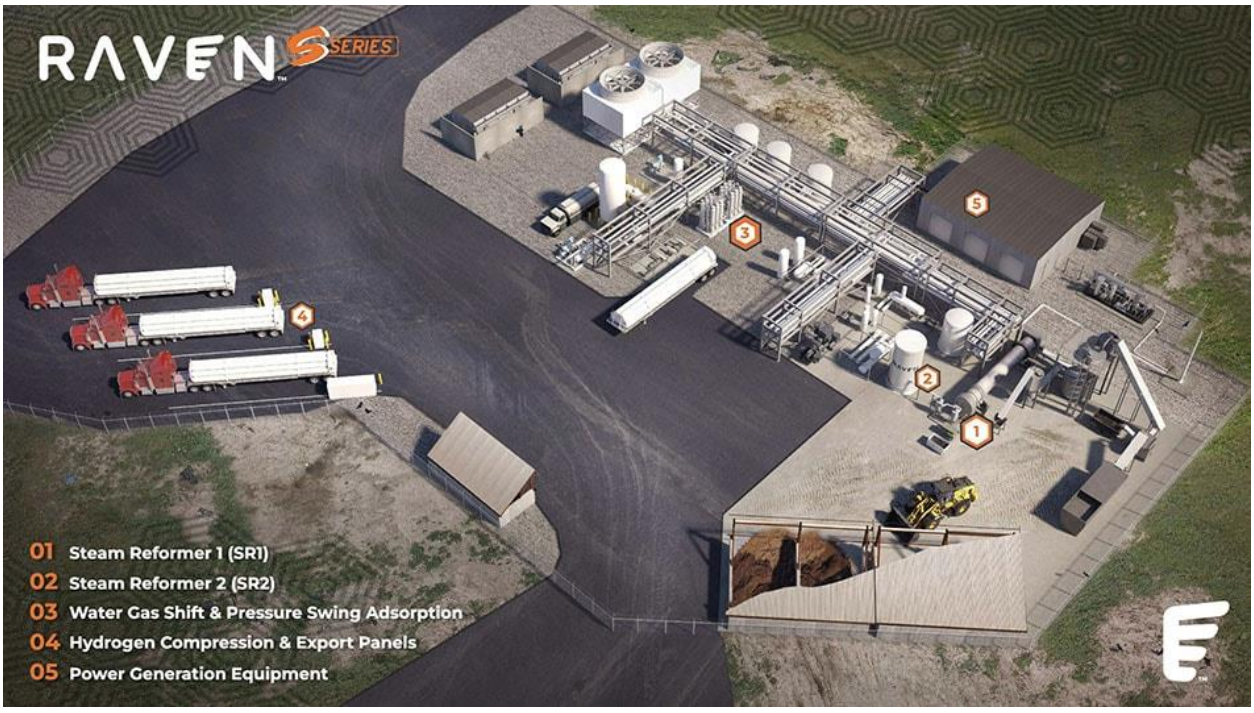

Raven SR Inc., a renewable fuels company headquartered in Pinedale, Wyoming, has received approval of its California Environmental Quality Act (CEQA) permit by the Richmond City Council for Raven SR's first organic waste-to-hydrogen bioenergy project, which will be located in Richmond, California.

"The City of Richmond is excited to begin this journey into the future of green technology, a green economy, a green workforce, and a greener world," says City of Richmond Mayor Eduardo Martinez. "The Raven SR project will contribute to the reduction of waste and greenhouse emissions and will employ local residents. The message that we are sending today is, Richmond is serious about addressing climate change and serious about providing solutions and alternatives to dirty jobs."

According to a news release from Raven SR, the project is expected to divert up to 99 wet tons of green and food waste per day from Republic Services' West Contra Costa Sanitary Landfill (WCCLS) into Raven SR's noncombustion steam/CO_2 reforming process, producing up to 2,400 metric tons of renewable hydrogen per year.

“We are honored that the City of Richmond unanimously approved our waste-to-hydrogen facility, setting the stage for the community to be a leader in the global hydrogen transition,” says Matt Murdock, CEO of Raven SR. “By diverting organic waste from Republic Services’ closed WCCLS, this facility will produce clean hydrogen and reduce both greenhouse gases and cumulative cancer and noncancer risks in the community. Moreover, the project will economically benefit the Richmond community by supplying local gas stations with clean, zero-carbon hydrogen fuel for fuel cell vehicles and creating new green jobs, including 100-150 construction positions.”

Raven SR says diversion of the organic waste will help fulfill California’s SB 1383 mandates and will potentially avoid up to 7,200 metric tons per year of CO_2 emissions from the landfill. The project is expected to produce at least 60 percent of its own electricity by using methane from the landfill in new state-of-the-art electric generators, further reducing both the current air emissions and the need for grid power for its noncombustion process.

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The project is in the final stages of obtaining a permit from the Bay Area Air Quality Management Department (BAAQMD), which previously approved Raven SR’s pilot facility. Upon receiving authority to construct from BAAQMD, the company says it plans to break ground on the facility this summer, with full commercial operations beginning in the first quarter of 2024.

Raven SR says it has arranged off-take agreements for the hydrogen supply with several companies, including project equity investors Hyzon Motors and Chevron New Energies, that plan to market the hydrogen in Bay Area and Northern California fueling stations, enabling the energy transition to zero-emission vehicles. Hyzon, a global supplier of fuel cell electric commercial vehicles, plans to provide refueling for hydrogen fuel cell trucks at a hydrogen hub in Richmond.

The new facility will use Raven SR technology, which is a noncombustion thermal, chemical reductive process that converts organic waste and landfill gas to hydrogen and Fischer-Tropsch synthetic fuels. Unlike other hydrogen production technologies, its steam/CO_2 reformation does not require fresh water as a feedstock and uses less than half the energy of electrolysis. The process can deliver fuel with low to negative carbon intensity. Additionally, Raven SR’s goal is to generate as much of its own power on-site as possible to reduce reliance on and be independent of the grid. Its modular design provides a scalable means to locally produce renewable hydrogen and synthetic liquid fuels from local waste.